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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,828	10/01/2003	Steven W. Havens	690-001	8799

7590 06/08/2006

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EXAMINER

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,828

Applicant(s)

HAVENS, STEVEN W.

Examiner

Michael P. Nghiem

Art Unit

2863

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2006 and 15 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26, 37 and 42-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26, 37 and 42-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The Amendment filed on April 5, 2006 has been acknowledged.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 15, 2006 has been entered.

Claim Objections

Claims 37 and 47 are objected to because of the following informalities:

- claim 37, "Apparatus" (line 1) should be – The method --.
- claim 47, "aid" (line 3) should be – said --.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Art Unit: 2863

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-26, 37, and 42-50 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The method claims do not produce any tangible results. The practical application of the claimed invention cannot be realized until the information determined is conveyed to the user. For the result to be tangible, it would need to be outputted to a user or displayed to a user or stored for later use. For example, the result of the time correlation of data (e.g. claim 1) and the result of processing received data (e.g. claim 47) need to be outputted to a user, displayed to a user, or stored for later use. Hence, the claims are treated as non-statutory functional descriptive material (see MPEP 2106).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 7-14, 18-21, 26, 37, and 42 are rejected under 35 U.S.C. 102(e) as being anticipated by Lewis et al. (US 6,455,319).

Regarding claims 1 and 42, Lewis et al. discloses a method (Fig. 1) for correlating raw transducer data in a system of transducers (array of sensors 110) comprising the steps of:

- communicating transducer data in a common format (measuring response from sensors, Abstract, lines 7-8);
- characterizing the transducer data and relationships between transducers in a common format (Abstract, lines 8-10);
- defining interdependencies of transducers (column 3, line 65 – column 4, line 3) for modeling a system (column 3, lines 63-65);
- time correlating the data from the various transducers (column 2, lines 63-66).

Regarding claim 2, Lewis et al. discloses the step of communicating the transducer in a common format (column 2, lines 58-63).

Regarding claim 3, Lewis et al. discloses that the transducer data produces measurements of physical parameters (detection of an analyte from sensors, column 3, lines 43-44).

Regarding claim 4, Lewis et al. discloses measurements comprise samples of one or more physical parameters (responses from sensors, column 3, line 44).

Regarding claim 7, Lewis et al. discloses that the data is communicated in clusters (Fig. 1).

Regarding claim 8, Lewis et al. discloses that the clusters have time tags (column 2, lines 63-66).

Regarding claim 9, Lewis et al. discloses that the time tag is representative of the state of a system clock at the time of the first sample of the cluster (time tagging data).

Regarding claim 10, Lewis et al. discloses that the data is communicated in a transducer markup language (sensor response).

Regarding claim 11, Lewis et al. discloses that the transducer data is communicated without loss of fidelity (loss of fidelity is not mentioned in reference).

Regarding claim 12, Lewis et al. discloses that the basis of the common format is a transducer characteristic frame (Fig. 1).

Regarding claim 13, Lewis et al. discloses that the transducer characteristic frame has a dimension of at least 0, 1, 2, 3, or greater (dimension of array, Fig. 1).

Regarding claim 14, Lewis et al. discloses that the common characterization expresses spatial, or temporal, or other relations between samples using a common transducer characteristic frame (Abstract, line 9).

Regarding claim 18, Lewis et al. discloses using a transducer to model time varying properties of another transducer (column 2, lines 60-63).

Regarding claim 19, Lewis et al. discloses that the step of specifying interdependencies between transducers as at least one of attached; dangling; position; and attitude; and derivatives thereof (spatio profile, column 2, line 60-61).

Regarding claim 20, Lewis et al. discloses that the step of adding any number of additional transducers to the system and following the previously recited steps (include second sensor to first sensor, column 2, line 63).

Regarding claim 21, Lewis et al. discloses calculating a specific time tag using a temporal transducer characteristic frame model (column 2, lines 63-66).

Regarding claim 26, Lewis et al. discloses storing the correlated transducer data for retrieval and processing at a time after correlation (via 180, Fig. 1).

Regarding claim 37, Lewis et al. discloses display means for displaying selectable portions of the transducer data (Fig. 4's).

Regarding claim 42, even though Lewis et al. does not disclose the recitation of "the transducer data produces measurements of physical parameters in the form of samples thereof, and where the samples each comprises a transducer characteristic frame", the recitation has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Claim 47 is rejected under 35 U.S.C. 102(e) as being anticipated by Springg et al. (US 2005/0046569).

Regarding claim 47, Springg et al. discloses a method (Fig. 1) for capturing and processing data generated from first and second dissimilar transducers (sensors are dissimilar, Fig. 1) each of which normally transmit data in respectively unique formats (since sensors are diverse, paragraph 0013, line 7), said method comprising the steps of causing aid first transducer to transmit data in a standardized hierarchal format (22

transmits data in standardized format via 12 to 16, Fig. 1); causing said second transducer to transmit data in said standardized hierarchal format (21 transmits data in standardized format via 12 to 16, Fig. 1); receiving said data in the form of said standardized hierarchal format from said first transducer (16 receives data in standardized format via 12 from 22, Fig. 1); receiving said data in the form of said standardized hierarchal format from said first transducer (16 receives data in standardized format via 12 from 21, Fig. 1); and processing said all of said received data (16 processes data received, Fig. 1).

Response to Arguments

Applicant's arguments filed on April 5, 2006 have been fully considered but they are not persuasive.

With respect to the 35 USC 102 rejections, Applicants argue that none of the art of record teaches or discloses the use of a system of diverse transducers or other features which form the new claims.

Examiner's position is that the diverse transducers are not recited in claims 1-26, 37, and 42-46. Examiner maintains his position as discussed above.


Springgs et al. discloses the diverse transducers (paragraph 0013, line 7) recited in claim 47. Examiner's position regarding claim 47 has been discussed above.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (571) 272-2277. The examiner can normally be reached on M-H.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

June 1, 2006